REMARKS

This Amendment is filed in response to the Office Action dated June 25, 2004, which has a shortened statutory period set to expire September 25, 2004. Applicant respectfully traverses the rejections of the claims as follows.

Claim 1, as amended, now recites, "wherein a frequency of the driving waveform is based on a linearly translated input source voltage". Applicant respectfully submits that Gray fails to teach this limitation.

Specifically, element 230 (which is cited in the Office Action as teaching this limitation) is an integrator connected to a node of a voltage divider comprising resistors 216 and 217, wherein the node provides a voltage proportional to the OUTAPB signal. Paragraph [0054]. As taught by Gray, the purpose of integrator 230 is to generate a DC signal at VCO_Control such that the time-averaged voltage at node N6 is substantially equal to reference voltage VR2. Paragraph [0054] Notably, integrator 230 does not linearly translate an input source voltage, such as that provided by battery 101.

Paragraph [46] lines 10-17 (also cited in the Office Action as teaching this limitation) teach that comparator 223 outputs a PWM signal that can be provided to an output driver, which in turn provides the non-overlapping clock signals OUTA and OUTAPB to transistors 104 and 105. Notably, comparator 223 also does not linearly translate an input source voltage, such as that provided by battery 101.

Because Gray fails to disclose or suggest "wherein a frequency of the driving waveform is based on a linearly translated input source voltage", Applicant requests reconsideration and withdrawal of the rejection of Claim 1.

Claims 2-4 depend from Claim 1 and therefore are patentable for at least the reasons presented for Claim 1. Based on those

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reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claims 2-4.

Claim 5, as amended, recites, "wherein the frequency is based on a range of input source voltages and a range of desired linearly translated source voltages associated with the PZT" and therefore is patentable for at least the reasons presented for Claim 1. Based on those reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claim 5.

Claim 6, as amended, recites, "wherein the frequency is based on a range of input source voltages and a range of desired linearly translated source voltages associated with the PZT" and therefore is patentable for at least the reasons presented for Claim 1. Based on those reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claim 6.

Claim 7 depends from Claim 6 and therefore is patentable for at least the reasons presented for Claim 6. Based on those reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claim 7.

Claim 8 recites, "a first resistor coupled between a node and a high voltage source, wherein the high voltage source is one voltage in the range of input source voltages" and therefore is patentable for at least the reasons presented for Claim 1. Applicant traverses the characterization that signal OUTAPB is a "high voltage source" as recited in Claim 8. Based on those reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claim 8.

Claim 9 depends from Claim 8 and therefore is patentable for at least the reasons presented for Claim 8. Based on those reasons, Applicant also requests reconsideration and withdrawal of the rejection of Claim 9.

CONCLUSION

Claims 1-9 are pending in the present application. Allowance of these claims is respectfully requested.

If there are any questions, please telephone the undersigned at 408-451-5907 to expedite prosecution of this case.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as FIRST CLASS MAIL in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 15, 2004.

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Signature:

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